

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) A fixation system for fixing an implantable device in a body cavity, comprising:
 - an implantable device;
 - a plurality of resilient delivery members movable between a generally longitudinal delivery position and a radially expanded deployment position, the delivery members defining a delivery channel therein with a distal opening, each delivery member having a distal end formed with a blunt profile adapted to engage the implantable device;
 - a fixation component slidably disposed in each of the delivery channels, each fixation component having a proximal end formed with a slot, a first fixation member, a second fixation member, and a tether connecting the first and second fixation members; and
 - a pusher slidably disposed in each of the delivery channels to push the fixation component in each delivery channel, each pusher including a distal end with a tab sized to frictionally engage the slot and to provide a disconnectable connection between the fixation component and the pusher; ~~and~~
 - wherein each of the delivery members have a longitudinal slot communicating with an exterior of the delivery member and extending a length of the delivery channel, wherein the tether passes through the longitudinal slot of the delivery members;
 - wherein the implantable device comprises a vascular graft having a periphery, the vascular graft forming a plurality of folds when loaded about the plurality of delivery members in the longitudinal delivery position;
 - wherein each delivery member cooperates with one of the folds such that the folds ensure that the delivery members engage the vascular graft at points equally spaced about the periphery of the vascular graft when the delivery members are in the radially expanded deployment position.

2. (Original) The fixation system of claim 1 and further comprising: a delivery sheath slidable over the plurality of resilient delivery members.
3. (Original) The fixation system of claim 1 wherein the delivery members define the delivery channel as a closed lumen therein with the distal opening.
4. (Canceled)
5. (Previously Presented) The fixation system of claim 1 wherein the delivery members, when in the deployed position, urge the implantable device against a wall of the body cavity.
6. (Original) The fixation system of claim 5 wherein the first fixation member is disposed to pierce the implantable device and a wall of the body cavity when advanced from the delivery channel by the pusher.
7. (Original) The fixation system of claim 6 wherein the first fixation member has a sharpened end for piercing the implantable device and body cavity wall.
8. (Original) The fixation system of claim 6 wherein the first and second fixation members are arranged in a generally longitudinally aligned orientation when in the delivery channel.
9. (Original) The fixation system of claim 8 wherein one of the first and second fixation members are releasably connected to the pusher.
10. (Currently Amended) A fixation system for use in a body cavity, comprising:
 - an implantable device;
 - a plurality of resilient delivery members movable between a generally longitudinal delivery position and a radially expanded deployment position, the delivery

members defining a delivery channel therein with a distal opening, each delivery member having a distal end formed with a blunt profile adapted to engage the implantable device;

a fixation component slideably disposed in each of the delivery channels, each fixation component having a proximal end formed with a slot, a first fixation member, a second fixation member, and a tether connecting the first and second fixation members;

a pusher slideably disposed in each of the delivery channels to push the fixation component in each delivery channel, each pusher including a distal end with a tab sized to frictionally engage the slot and to provide a disconnectable connection between the fixation component and the pusher;

a delivery sheath slideable over the plurality of resilient delivery members; and
an inner sheath, the plurality of delivery members being arranged generally radially about an exterior surface of the inner sheath[.,,];

wherein each of the delivery members have a longitudinal slot communicating with an exterior of the delivery member and extending a length of the delivery channel, wherein the tether passes through the longitudinal slot of the delivery members;

wherein the implantable device comprises a vascular graft having a periphery, the vascular graft forming a plurality of folds when loaded about the plurality of delivery members in the longitudinal delivery position;

wherein each delivery member cooperates with one of the folds such that the folds ensure that the delivery members engage the vascular graft at points equally spaced about the periphery of the vascular graft when the delivery members are in the radially expanded deployment position.

11. (Original) The fixation system of claim 10 wherein the implantable device comprises: a vascular graft.

12. (Original) The fixation system of claim 11 and further comprising: a releasable fixation member releasably fixing the vascular graft to a distal end of the inner sheath.

13. (Original) The fixation system of claim 10 and further comprising: an expandable member expandable from a contracted position closely proximate an exterior of the delivery sheath to an expanded position urging the vascular graft against the wall of the body cavity.

14. (Original) The fixation system of claim 13 wherein the expandable member is positioned at a distal end of the delivery sheath.

15. (Original) The fixation system of claim 14 wherein the expandable member has a distal end thereof shaped in the expanded position to conform to a shape of the delivery members in the deployment position.

16. (Currently Amended) A fixation system for use in a body cavity, comprising:

an implantable device;

a plurality of resilient delivery members movable between a generally longitudinal delivery position and a radially expanded deployment position, the delivery members defining a delivery channel therein with a distal opening, each delivery member having a distal end formed with a blunt profile adapted to engage the implantable device;

a fixation component slideably disposed in each of the delivery channels; and

a pusher slideably disposed in each of the delivery channels to push the fixation component in each delivery channel;

wherein each of the delivery members defines an associated delivery channel as a channel having a longitudinal slot communicating with an exterior of the delivery member and extending a length of the delivery channel to the delivery member distal end; and

the fixation components comprise a pair of piercing members tethered together by a tether, wherein the tether passes through the longitudinal slot of the delivery members;

wherein the implantable device comprises a vascular graft having a periphery, the vascular graft forming a plurality of folds when loaded about the plurality of delivery members in the longitudinal delivery position;

wherein each delivery member cooperates with one of the folds such that the folds ensure that the delivery members engage the vascular graft at points equally spaced about the periphery of the vascular graft when the delivery members are in the radially expanded deployment position.

17-18. (Canceled)

19. (Previously Presented) The fixation system of claim 16 wherein the tether is oriented to ride through the slots in the adjacent delivery members as the pushers advance the piercing members through the channel in the delivery members.

20. (Original) The fixation system of claim 19 wherein the pairs of piercing members are advanced through the implantable device and through a wall of the body cavity, the piercing members pulling ends of the tether through the implantable device and through the wall of the body cavity.

21-46. (Canceled)